

**Listing of Claims****1. - 25. (cancelled)**

1           **26. (new) A screen assembly for a vibratory separator, the screen assembly**  
2           **comprising**

3                   **a frame with a first frame end spaced apart from a second frame**  
4           **end by two opposed spaced-apart sides including a first side and a second side,**

5                   **screening material on the frame,**

6                   **a plurality of crossmembers spaced apart and extending from the**  
7           **first side to the second side, each crossmember of the plurality of**  
8           **crossmembers connected to the first side and the second side,**

9                   **each crossmember of the plurality of crossmembers having at least**  
10           **one elongated flat member,**

11                  **the at least one elongated flat member having at least one series**  
12           **of openings therethrough, and**

13                  **wherein each crossmember has a length and the at least one series**  
14           **of openings extending along substantially all of said length.**

1           **27. (new) The screen assembly of claim 26 wherein the at least one series of**  
2           **openings is two parallel spaced-apart series of openings.**

1           **28. (new) The screen assembly of claim 26 wherein the openings of the at**  
2           **least one series of openings are triangular in shape.**

1           **29. (new) The screen assembly of claim 28 wherein alternating openings are**  
2           **inverted with respect to openings adjacent thereto.**

1           **30. (new) The screen assembly of claim 28 further comprising**

2                   **a plurality of spaced-apart rods connected between and to the first**  
3           **frame end and the second frame end, and**

4                   **each rod of the plurality of spaced-apart rods passing through the**  
5           **plurality of crossmembers.**

1           **31. (new) The screen assembly of claim 26 wherein each of the two spaced-**  
2           **apart sides has a series of side openings.**

1           **32. (new) The screen assembly of claim 31 wherein each of the two spaced-**  
2           **apart sides has a series of cut out portions.**

1           33. (new) The screen assembly of claim 32 wherein the side openings are not  
2 lined up with the cut out portions.

1           34. (new) The screen assembly of claim 261 at least one of the first frame end  
2 and the second frame end has a series of spaced-apart openings.

1           35. (new) The screen assembly of claim 26 wherein the at least one series of  
2 openings therethrough comprises a series of spaced-apart openings so that each of  
3 said crossmembers is a truss-like structure.

1           36. (new) The screen assembly of claim 26 wherein at least one elongated flat  
2 member is two of said members, comprising a first member and a second member, the  
3 first member having a length and the second member having a length,

4                         the first member and the second member aligned along their  
5 lengths and at an angle to each other forming a "V" shape when viewed on  
6 end.

1           37. (new) The screen assembly of claim 26 wherein the screening material is  
2 a plurality of superimposed layers of screening material.

1           38. (new) The screen assembly of claim 37 wherein the plurality of layers of  
2 screening material are connected together and are connected to the plurality of  
3 crossmembers.

1           39. (new) The screen assembly of claim 26 further comprising  
2                         a plurality of holding portions including a plurality of holding  
3 portions on each of the first side and the second side, each of the plurality of holding  
4 portions for holding one of the plurality of crossmembers, each holding portion  
5 extending inwardly from a surface of the first side or of the second side,

6                         each holding portion connected to a corresponding crossmember,  
7 and

8                         each crossmember having two ends and a holding portion  
9 connected to each of said ends.

1           40. (new) The screen assembly of claim 39 wherein each holding portion has  
2 a recess therein and part of a corresponding crossmember is disposed within said  
3 recess.

1           41. (new) A vibratory separator for treating material introduced thereto, the  
2 vibratory separator comprising

**screen assembly holding apparatus,  
vibration apparatus for vibrating a screen assembly on the screen  
assembly holding apparatus, and**

at least one screen assembly on the screen assembly holding apparatus, the at least one screen assembly comprising a frame with a first frame end spaced apart from a second frame end by two opposed spaced-apart sides including a first side and a second side, screening material on the frame, a plurality of crossmembers spaced apart and extending from the first side to the second side, each crossmember of the plurality of crossmembers connected to the first side and the second side, each crossmember of the plurality of crossmembers having at least one elongated flat member, the at least one elongated flat member having at least one series of openings therethrough, and wherein each crossmember has a length and the at least one series of openings extending along substantially all of said length.

42. (new) A method for treating material with a vibratory separator, the method comprising

introducing material to be treated to a vibratory separator, the vibratory separator comprising

screen assembly holding apparatus including screen mounting structure,

**vibration apparatus for vibrating a screen assembly on the screen assembly holding apparatus,**

at least one screen assembly on the screen assembly holding apparatus, the at least one screen assembly comprising a frame with a first frame end spaced apart from a second frame end by two opposed spaced-apart sides including a first side and a second side, screening material on the frame, a plurality of crossmembers spaced apart and extending from the first side to the second side, each crossmember of the plurality of crossmembers connected to the first side and the second side, each crossmember of the plurality of crossmembers having at least one elongated flat member, the at least one elongated flat member having at least one series of openings therethrough, and wherein

19                   each crossmember has a length and the at least one series of openings  
20                   extending along substantially all of said length.

21       43. (new) The method of claim 42 wherein the vibratory separator includes  
22       screen mounting structure, the screen mounting structure including a plurality of  
23       support members extending from a first separator side of the vibratory separator to  
24       a second separator side thereof with material flowable between said sides in a first  
25       direction that is a direction generally parallel to said sides, the screen assembly having  
26       a support and screening material on the support for treating material introduced to the  
27       vibratory separator, the support including four interconnected sides including two pairs  
28       of sides, a first pair with a first side and a second side and a second pair with a third  
29       side and a fourth side, the first side spaced-apart from the second side by spaced-  
30       apart third and fourth sides, the first side and the second side generally parallel to the  
31       first separator side and the second separator side upon installation of the screen  
32       assembly in the vibratory separator, the support having generally screening material  
33       thereon, the support having a plurality of spaced-apart longitudinal crossmembers  
34       extending between and connected to only one of the pairs of sides, each longitudinal  
35       crossmember not in contact with the third side and the fourth side, the screen  
36       mounting structure including crowning apparatus for forcible abutment against the  
37       third side and the fourth side of the support to effect bending of the first side and the  
38       second side of the support and thereby effect crowning of the screen assembly within  
39       the vibratory separator, the method further comprising

40                   locating the screen assembly on the screen mounting structure,  
41                   positioning the screen assembly with respect to the screen  
42       mounting structure so that the longitudinal crossmembers are all generally  
43       transverse to the first direction, and

44                   forcing the first and second sides of the support down with the  
45       crowning apparatus to effect crowning of the screen assembly, the support  
46       rigid yet sufficiently flexible so that with the screen assembly in a crowned  
47       configuration the third side and the fourth side each along substantially all of  
48       the length thereof sealingly contact a surface of the screen mounting structure.

1       44. (new) The screen assembly of claim 43 wherein the plurality of longitudinal  
2       crossmembers of the support includes a first longitudinal crossmember and a second

3 longitudinal crossmember and at least one transverse crossmember extending between  
4 and connected to the first longitudinal crossmember and the second longitudinal  
5 crossmember.

1 45. (new) The screen assembly of claim 44 wherein the at least one transverse  
2 crossmember is two transverse crossmembers equally spaced-apart from each other  
3 and from the first and second sides of the support.